

**DOCUMENT RESUME**

ED 318 983

CG 022 531

AUTHOR Gleghorn, Alice A.; Penner, Louis A.  
TITLE Body Image and Self-Esteem in Normal Weight Women.  
PUB DATE Aug 89  
NOTE 13p.; Paper presented at the Annual Convention of the American Psychological Association (97th, New Orleans, LA, August 11-15, 1989).  
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)  
EDRS PRICE MF01/PC01. Plus Postage.  
DESCRIPTORS \*Body Image; College Students; \*Females; Higher Education; \*Self Esteem

## ABSTRACT

Research suggests that, in clinical samples, body image disturbances are related to severe eating disorders and problems with self-concept and self-esteem. There have been relatively few studies, however, which have empirically investigated the relation between body image and personality characteristics among normal women. This study investigated the correlation between the attitudinal and perceptual components of body image and self-esteem in a sample of 56 normal weight female undergraduates with no history of an eating disorder. Subjects completed the Personal and Academic Self-Concept Inventory and the Body Parts Satisfaction Questionnaire. Perceptual body image was measured with the Adjustable Light Beam Apparatus and with the Image Marking Procedure. The results revealed that the attitudinal component of body image, but not the perceptual component, was significantly correlated with overall self-esteem and the physical appearance aspect of self-esteem. A significant correlation between the physical appearance dimension of self-esteem and global self-esteem was also found. This latter finding was consistent with findings obtained with eating disordered women. Findings have important implications for the role of physical self-esteem in prevention, treatment, and theories of etiology of the eating disorders. (NB)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

**Body Image and Self-Esteem in Normal Weight Women**

**Alice A. Gleghorn, Ph.D.  
University of California, San Diego  
Department of Psychiatry**

**Louis A. Penner, Ph.D.  
University of South Florida  
Department of Psychology**

**Presented at the Annual Meeting of the  
American Psychological Association, 1989.**

**BEST COPY AVAILABLE**

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it  
 Minor changes have been made to improve  
reproduction quality

Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy.

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

Alice A. Gleghorn

## ABSTRACT

There have been relatively few studies which have empirically investigated the relation between body image and personality characteristics among normal women. This study investigated the correlation between the attitudinal and perceptual components of body image and self-esteem in a sample of noneating disordered women. It was found that the attitudinal component of body image, but not the perceptual component, was significantly correlated with overall self-esteem and the physical appearance aspect of self-esteem. A significant correlation between the physical appearance dimension of self-esteem and global self-esteem was also found. This latter finding was consistent with findings obtained with eating disordered women.

## INTRODUCTION

There is now a rather substantial literature which suggests that, in clinical samples, body image disturbances are related to severe eating disorders and problems with self-concept/esteem. (Garner and Garfinkel, 1981). More recently, a few researchers have begun to investigate this relationship in normal samples. Underlying this research is the assumption that body image disturbances are associated with self concept/esteem problems in the general population. This assumption, while a reasonable extrapolation from the clinical literature, has not received a great deal of empirical study.

The present study was an attempt to further investigate the relationship between body image and self-esteem among normal women. The present study differed from the prior studies in two major ways. First, there were separate assessments of the attitudinal/affective and perceptual components of body image. Second, in addition to measuring overall self-esteem, the physical aspects and various other aspects of self-esteem were also measured.

Based on previous investigations of self-esteem and body image, it was predicted that global self-esteem would show a positive correlation with the attitudinal components of body image, and show a negative correlation with perceptual distortions of body image. In addition, body image disturbances were expected to show stronger correlations with self-esteem scales concerned with physical aspects of the self, (i.e.,

appearance, agility, athletic skill), than with non-physical aspects of the self, (i.e., mathematical and verbal skills). Because of the high incidence of dieting and weight concern among college women, it was also predicted that the scales concerned with the physical aspects of self-esteem would be strongly correlated with global self-esteem.

#### METHOD

##### Subjects

The subjects in this experiment were 56 normal weight, female undergraduates, who had no history of an eating disorder. Subjects were prescreened with a questionnaire and an interview for past or current behavior associated with eating disorders.

##### Measures

Fleming's (1987) 42-item Personal and Academic Self-Concept Inventory (PASCI) was used to measure global self-esteem (self-regard scale) and seven other aspects of self-esteem. A separate sum was obtained for each factor; high scores indicated more positive feelings toward that aspect of the self-concept. Subjects also provided a state rating of self-esteem regarding their physical appearance and physical abilities (Physical Rating Scale, PRS). High scores on these scales reflected negative self-esteem.

Attitudinal/affective body image was assessed with the 25-item Body Parts Satisfaction Questionnaire (BPSQ) (Berscheid, Walster and Bohrenstedt, 1973). In the scale, subjects indicated satisfaction with 25 body features, yielding a total score index

of satisfaction. All scales employed a Likert response format and had acceptable reliabilities.

Perceptual body image was measured with the Adjustable Light Beam Apparatus (ALBA) described by Thompson, Berland, Linton and Weinsier, (1986) and with the Image Marking Procedure (IMP) developed by Askevold (1975). The sum of the actual widths of shoulders, waist and hips was subtracted from the sum of the estimated widths to obtain a total perceptual distortion score for the ALBA and IMP. Prior research (Gleghorn, Penner, Powers and Schulman, 1987), showed acceptable reliability for both these measures.

#### Procedure

After subjects were screened, the body image and self-esteem measures were administered in a random order. The actual dimensions of shoulders, waist and hips were measured with calipers after all other questionnaires and procedures were completed.

#### RESULTS

The Pearson-product moment correlations between the self-esteem scales and the body image measures are shown in Table 1. The correlations between the PSCI global self-regard scale and the body image measures were significant only for the attitudinal measure, the BPSQ. The correlations between the BPSQ and the remaining PSCI self-esteem measures concerned with social self-esteem, physical appearance, parental acceptance and social anxiety, were positive and significant. The perceptual body

image measures were not significantly correlated with overall self-regard, but were correlated with the Parental Acceptance subscale of the PASCI. The correlations of the BPSQ with the PRS were negative and significant for the physical appearance scale, but not for the physical abilities scale. There were no significant correlations between the PRS and the perceptual body image measures.

The correlations of the PASCI and PRS subscales with the PASCI overall measure of self-esteem (self-regard) are presented in Table 2. The correlations between global self-regard and the physical appearance scales of the PASCI and PRS were the largest of the esteem dimensions, ( $r=.68$ ,  $p<.01$ , and,  $r=-.62$ ,  $p<.01$ ); the correlations of the PASCI and PRS physical abilities scales with self-regard were also significant but somewhat smaller ( $r=.33$ ;  $r=-.27$ ;  $p<.05$ ).

#### DISCUSSION

The prediction of high positive correlations between the measure of the attitudinal/affective component of body image, body satisfaction, and global self-esteem was confirmed and consistent with previous studies (Garfinkel and Garner, 1982). However, the predicted negative correlation between the perceptual measures of body image and global self-esteem was not found. These results are inconsistent with the results of Thompson and Thompson (1986) which also used the ALBA as a measure of perceptual body image. In addition, the expected strong correlations of body image measures with the physical

aspects of self-esteem were also confirmed for the BPSQ, but were not shown with either the IMP or ALBA. Finally, the physical appearance scales of the PASCI and the PRS showed generally stronger correlations with global self-esteem relative to the other esteem dimensions.

The general lack of association between the perceptual component of body image and self-esteem merits discussion. It is possible that the degree of perceptual body image distortion among these normal weight, asymptomatic women was too small to yield statistically meaningful relations with a small sample. In a larger population, or in a population of anorexics where the perceptual distortions would be expected to be more dramatic, the relationship of perceptual body image with self-esteem might be more robust. In contrast, dissatisfaction with the body and attitudinal disturbances are extremely common even among women without an eating disorder, therefore, the relationship between this factor and self-esteem may be more readily found.

It should be noted, however, that the absence of a significant relationship between the perceptual component of body image and self-esteem measures is consistent with more recent research on body image. Thompson and Penner (1989) have reanalyzed data from several studies which measured distortion of size of body sites and various psychological variables, including self-esteem. The sample sizes in some of these studies exceeded 100 and the samples drawn ranged from adults to adolescents. Across these studies distortion of size of body parts typically

failed to show any significant relation with the psychological measures. Actual size of body sites and the discrepancy from ideal size of these sites did, however, correlate significantly with the measures. These findings, in conjunction with the ones reported here, raise some serious questions as to whether perceptual body image distortion is related to psychological problems among noneating disordered individuals.

The strong relationship physical appearance and global self-esteem is consistent with recent hierarchical/multidimensional theories of self-esteem. Given the increase in dieting behaviors and society's emphasis on slimness for women (Polivy and Herman, 1987), it is not surprising that physical appearance is the one esteem factor most highly correlated with global self-esteem. It is of particular interest that this relationship, which has been speculated to be true among eating disordered women, was found here in normal weight, asymptomatic, young adult women. The moderate correlations of physical ability with global self-esteem may reflect the importance of physical appearance relative to physical abilities in this sample. These findings have important implications for the role of physical self-esteem in prevention, treatment, and theories of etiology of the eating disorders, which should be pursued in future research.

### References

Askevold, E. (1978). Measuring body image. Psychotherapy and Psychosomatics, 26:71-77.

Berscheid, E., Walter, E., and Bohrenstedt, G. (1973). The happy american body: A survey report. Psychology Today, November: 119-131.

Fleming, J. (1987). The PSCI: Personal and academic self-concept inventory. A paper presented at the Western Psychological Association, Long Beach, CA.

Garfinkel, P. and Garner, D. (1987). Anorexia Nervosa: A Multidimensional Perspective. New York: Bruner/Mazel, Inc.

Garner, D. and Garfinkel, P. (1981-1982). Body image in anorexia nervosa: Measurement, theory and clinical implications. International Journal of Psychological Medicine, 11:263-284.

Gleghorn, A., Penner, L., Powers, P. and Schulman, R. (1987). The psychometric properties of several measures of body image. Journal of Psychopathology and Behavioral Assessment, 9, No.2:203-218.

Polivy, J. and Herman, P. (1987). Diagnosis and treatment of normal eating. Journal of Consulting and Clinical Psychology, 55:No.5:635-644.

Thompson, J., Berland, N., Linton, P. and Weinsier, R. (1986). Utilization of a self-adjusting light beam in the objective assessment of body distortion in seven eating disorder groups. International Journal of Eating Disorders, 5:113-120.

Thompson, J. and Penner, L. (1989). Symposium on Measurement of Body Image, Southeastern Psychological Association, Atlanta, GA.

Thompson, J. and Thompson, C. (1986). Body size distortion and self-esteem in asymptomatic, normal weight males and females. International Journal of Eating Disorders, 5, No.6:1061-1068.

TABLE 1

Correlations Between Attitudinal and Perceptual  
 Components of Body Image and Self-Esteem  
 (n=56)

	<u>BPSQ</u>	<u>IMP</u>	<u>ALBA</u>
<b>Personal and Academic    Self-Concept Inventory</b>			
Self-Regard	.52**	-.05	-.02
Social Self-Esteem	.32*	.00	.05
Math Abilities	.16	-.04	.05
Verbal Abilities	.04	-.10	-.01
Physical Appearance	.58**	-.14	.17
Physical Abilities	.38*	.02	.17
Parental Acceptance	.35*	-.31*	-.31*
Social Anxiety	.31*	-.04	.01
<b>Physical Rating Scales</b>			
Physical Appearance	-.51*	.17	.08
Physical Abilities	-.22	-.16	-.10

\* p<.05

\*\*p<.01

BPSQ: Body Parts Satisfaction Questionnaire

IMP: Image Marking Procedure

ALBA: Adjustable Light Beam Apparatus

TABLE 2

Correlations Between PASCI and PRS Subscales and  
PASCI Global Self-Regard  
(n=56)

Personal and Academic  
Self-Concept Inventory

	<u>Self-Regard</u>
Social Self-Esteem	.44**
Math Abilities	.20
Verbal Abilities	.20
Physical Appearance	.68**
Physical Abilities	.33*
Parental Acceptance	.36*
Social Anxiety	.40*

Physical Rating Scales

Physical Appearance	-.62**
Physical Abilities	-.27*

\* p<.05

\*\*p<.01